

In the Claims

1-94. (canceled)

95. (new) An isolated polypeptide consisting of:

- a) SEQ ID NO: 6;
- b) SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R);
- c) between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R;
- d) SEQ ID NO: 8 or SEQ ID NO: 13;
- e) an active mutant of a), b), c) or d), wherein one or more of the amino acids has been conservatively substituted and said active mutant binds to OX40R;
- f) a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to:
  - i) SEQ ID NO: 6;
  - ii) SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R);
  - iii) between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R; or
  - iv) SEQ ID NO: 8 or SEQ ID NO: 13; or
- g) a derivative of a), b), c), d), e) or f).

96. (new) The isolated polypeptide according to claim 95, wherein said fusion polypeptide or peptide comprises the amino acid sequence belonging to one or more of the following protein sequences: membrane-bound proteins, extracellular domains of membrane-bound protein,

immunoglobulin constant region, multimerization domains, extracellular proteins, signal peptide-containing proteins, export signal-containing proteins.

97. (new) The isolated polypeptide according to claim 95, further comprising a molecule selected from the group consisting of radioactive labels, biotin, fluorescent labels, cytotoxic agents, and drug delivery agents.

98. (new) The isolated polypeptide according to claim 95, wherein said polypeptide consists of SEQ ID NO: 6.

99. (new) The isolated polypeptide according to claim 95, wherein said polypeptide consists of SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R).

100. (new) The isolated polypeptide according to claim 95, wherein said polypeptide consists of between 5 and 10 contiguous amino acids of between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R.

101. (new) The isolated polypeptide according to claim 95, wherein said polypeptide consists of SEQ ID NO: 8.

102. (new) The isolated polypeptide according to claim 95, wherein said polypeptide consists of SEQ ID NO: 13.

103. (new) The isolated polypeptide according to claim 95, wherein said polypeptide consists of an active mutant of a), b), c) or d), wherein three or fewer amino acids are conservatively substituted and said active mutant binds to OX40R.

104. (new) The isolated polypeptide according to claim 95, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 94-124 of human OX40L.

105. (new) The isolated polypeptide according to claim 95, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of SEQ ID NO: 6.

106. (new) The isolated polypeptide according to claim 95, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R).

107. (new) The isolated polypeptide according to claim 95, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R.

108. (new) The isolated polypeptide according to claim 95, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of SEQ ID NO: 8 or SEQ ID NO: 13.

109. (new) The isolated polypeptide according to claim 95, wherein said polypeptide is a derivative of a), b), c), d), e) or f).

110. (new) The isolated polypeptide according to claim 95, wherein said polypeptide antagonizes the activity of OX40R.

111. (new) A composition comprising a pharmaceutically acceptable carrier, excipient, stabilizer, diluent, or combination thereof and a polypeptide consisting of:

- a) SEQ ID NO: 6;
- b) SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R);
- c) between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R;
- d) SEQ ID NO: 8 or SEQ ID NO: 13;
- e) an active mutant of a), b), c) or d), wherein one or more of the amino acids has been conservatively substituted and said active mutant binds to OX40R;
- f) a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to:
  - i) SEQ ID NO: 6;
  - ii) SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R);
  - iii) between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R; or
  - iv) SEQ ID NO: 8 or SEQ ID NO: 13; or
- g) a derivative of a), b), c), d), e) or f).

112. (new) The composition according to claim 111, wherein said polypeptide consists of SEQ ID NO: 6.

113. (new) The composition according to claim 111, wherein said polypeptide consists of SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R).

114. (new) The composition according to claim 111, wherein said polypeptide consists of between 5 and 10 contiguous amino acids of between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R.

115. (new) The composition according to claim 111, wherein said polypeptide consists of SEQ ID NO: 8.

116. (new) The composition according to claim 111, wherein said polypeptide consists of SEQ ID NO: 13.

117. (new) The composition according to claim 111, wherein said polypeptide consists of an active mutant of a), b), c) or d), wherein three or fewer amino acids are conservatively substituted and said active mutant binds to OX40R and said polypeptide contains SEQ ID NO: 13.

118. (new) The composition according to claim 111, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of SEQ ID NO: 13.

119. (new) The composition according to claim 111, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of SEQ ID NO: 6.

120. (new) The composition according to claim 111, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R).

121. (new) The composition according to claim 111, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide

consisting of between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R.

122. (new) The composition according to claim 111, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of SEQ ID NO: 8 or SEQ ID NO: 13.

123. (new) The composition according to claim 111, wherein said polypeptide is a derivative of a), b), c), d), e) or f).

124. (new) A composition of matter comprising a solid support and a polypeptide consisting of:

- a) SEQ ID NO: 6;
- b) SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R);
- c) between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R;
- d) SEQ ID NO: 8 or SEQ ID NO: 13;
- e) an active mutant of a), b), c) or d), wherein one or more of the amino acids has been conservatively substituted and said active mutant binds to OX40R;
- f) a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to:
  - i) SEQ ID NO: 6;
  - ii) SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R);
  - iii) between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R; or

- iv) SEQ ID NO: 8 or SEQ ID NO: 13; or
- g) a derivative of a), b), c), d), e) or f).

125. (new) The composition of matter according to claim 124, wherein said polypeptide consists of SEQ ID NO: 6.

126. (new) The composition of matter according to claim 124, wherein said polypeptide consists of SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R).

127. (new) The composition of matter according to claim 124, wherein said polypeptide consists of between 5 and 10 contiguous amino acids of between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R.

128. (new) The composition of matter according to claim 124, wherein said polypeptide consists of SEQ ID NO: 8.

129. (new) The composition of matter according to claim 124, wherein said polypeptide consists of SEQ ID NO: 13.

130. (new) The composition of matter according to claim 124, wherein said polypeptide consists of an active mutant of a), b), c) or d), wherein three or fewer amino acids are conservatively substituted and said active mutant binds to OX40R and said polypeptide contains SEQ ID NO: 13.

131. (new) The composition of matter according to claim 124, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of SEQ ID NO: 6.

132. (new) The composition of matter according to claim 124, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of SEQ ID NO: 6.

133. (new) The composition of matter according to claim 124, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to SEQ ID NO: 6, wherein one or more amino acids have been deleted, said polypeptide contains SEQ ID NO: 13 and said polypeptide binds to the OX40 receptor (OX40R).

134. (new) The composition of matter according to claim 124, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of between 5 and 10 contiguous amino acids of SEQ ID NO: 1, wherein said polypeptide contains SEQ ID NO: 13 and binds to OX40R.

135. (new) The composition of matter according to claim 124, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of SEQ ID NO: 8 or SEQ ID NO: 13.

136. (new) The composition of matter according to claim 124, wherein said polypeptide is a derivative of a), b), c), d), e) or f).

137. (new) An isolated peptide, peptide mimetic, or a non-peptide mimetic of SEQ ID NO: 8 or SEQ ID NO: 13.

138. (new). The isolated polypeptide according to claim 95, wherein said polypeptide is acetylated, carboxylated or PEGylated.